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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,181	11/20/2003	Evran Y. Ener	S51.12-0049	9322
164	7590	11/28/2005		
KINNEY & LANGE, P.A. THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET MINNEAPOLIS, MN 55415-1002			EXAMINER SPISICH, GEORGE D	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/718,181

Applicant(s)

ENER ET AL.

Examiner

George D. Spisich

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/20/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). It is Examiners understanding that Figure 1 merely shows what is old, if this is incorrect, please explain. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "26" has been used to designate both the wheels and the "outrigger frame" in at least Figure 2, 3A and 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

The reference numeral "26" is used to identify both the wheels and the outrigger frame.

Appropriate correction is required.

Examiner objects to the Abstract provided. The provided Abstract does not include the "steerable wheel" aspect but merely an auxiliary axle on a concrete pumping truck. Examiner believes the "steerable wheels" are a critical detail of Applicant's invention. Furthermore, a proper Abstract should be between 50 and 150 words, and the provided Abstract is too short.

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

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The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

### ***Claim Objections***

Claim 17 is objected to because of the following informalities:

Claims 17 currently claims a support plate connected to the cross member and the pair of support arms. Examiner understands the disclosed support plate, but as presently worded there is one support plate connecting the cross member and the support arms (plate contacting and connecting all three elements). Examiner suggests Applicant reword this detail to claim either two support plates or that the support plate connects the cross member to a single support arm.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,5,7-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art in Figure 1 in view of Smith et al. (USPN 6,189,901).

Applicant's Prior Art in Figure 1 shows a concrete pumping truck having frame rails, a hopper carried at the rear end of the truck and an outrigger system. However, Figure 1 does not show an auxiliary axle system pivotally mounted at the rear of the truck. It is well known in the art to mount an auxiliary axle system at the rear of a work vehicle that typically hauls heavy loads. These axle systems are pivoted with respect to the frame to contact the ground when needed and raised when not needed. These auxiliary axles help to distribute the weight of the vehicle and its load and improve the security of the vehicle by increasing the contact between the wheels and the ground for added traction and stability.

Smith et al. shows an auxiliary axle system having a U-shaped frame having a base or cross member (140) and a pair of spaced arms (190, best seen in Figure 7) connected at one end to the cross member, the pair of spaced arms having a free end connected to a pair of spaced axles (160), the pair of spaced axles being pivotally

connected to a respective one of the steerable wheels. Smith et al. shows first and second connector arms (108) connected to the cross member and extending in a direction opposite the direction of the pair of spaced arms, the first and second connector arms pivotally mounted to a respective truck frame rail on the vehicle and means (120) which is at least one hydraulic cylinder (120) connected to a support surface of the vehicle and the U-shaped frame for moving the auxiliary axle system between a first position in contact with a ground surface and a second position elevated above the ground surface.

Smith et al. shows each of the pair of steerable wheels comprises a steering arm (173) connected to the wheel, the steering arm of each wheel connected by a tie rod (172). The mounting of the auxiliary axle system would read on the relationship of the axle to the hopper.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the auxiliary axle system as taught by Smith et al. on the rear of the Prior Art Figure 1 as it is well known in the art to add an auxiliary axle to help distribute the load and increase traction and stability.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Figure 1 in view of Smith et al. (USPN 6,189,901) as applied to claims 1,2,5,7-9 and 11-13 above, and further in view of Cherney et al. (USPN 5,897,123) provided in Applicant's IDS.

Prior Art Figure 1 in view of Smith et al. does not show a mounting bracket connected to the truck frame rails and the mounting bracket connected to a housing containing a bearing and the at least one hydraulic cylinder connected between an outrigger support and the U-shaped frame.

Cherney et al. shows an auxiliary axle system pivotally mounted on the rear of a concrete truck. There is shown a mounting bracket (540,510,512) connected to each of the truck frame rails at the rear end of the truck, each mounting bracket connected to a housing (560) containing a bearing (570) wherein the first connector arm and the second connector arm are pivotally connected to a respective housing bearing. The positioning of the hydraulic lift cylinder is between a lateral frame member and the U-shaped frame.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the auxiliary axle system as would be present in the Prior Art Figure 1 in view of Smith et al. by providing a mounting bracket on the end of the vehicle rails and having a housing and a bearing as shown by Cherney et al. and further mounting the hydraulic cylinder between what is the outrigger lateral frame member and the U-shaped member so as to provide a stable mounting structure for the auxiliary axle system and proper location for operation and effective use.

Claims 6,12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Figure 1 in view of Smith et al. (USPN 6,189,901) as applied to claims 1,2,5,7-9 and 11-13 above, and further in view of French (USPN 2,650,106).



Applicant's Figure 1 in view of Smith et al. does not show a tie rod having a bend such that the central portion is in a different plane than the end portions and the particular relationship with the hopper. Smith et al. only shows a straight tie rod.

French shows an axle system having pivoted wheel carriers connected to each other with a tie rod (17) having a central portion (18) that is offset from the end portion so as to be in a different plane. This arrangement allows for the adjustment of the tie rod and allows for different spatial relationships between the parts and systems of the vehicle.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tie rod of Prior Art Figure 1 in view of Smith et al. (shown in Smith et al.) by providing a tie rod having an offset central portion as taught by French so as to provide adjustment and particular spatial relationships with respect to other parts of the concrete pumping vehicle. The tie rod of French would meet the limitations of the tie rod spatial relationship with respect to the hopper of the Prior Art Figure 1.

Claims 10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Figure 1 in view of Smith et al. (USPN 6,189,901) as applied to claims 1,2,5,7-9 and 11-13 above, and further in view of Wyatt et al. (USPN 4,492,389) provided in Applicant's IDS.

Applicant's Prior Art Figure 1 in view of Smith et al. has been discussed in the prior rejection, however does not show mounting flanges on the end of the support arms and one end of a pair of hydraulic cylinders connected to the support arms.

Wyatt et al. discloses an auxiliary axle having support arms (30) having pair of mounting flanges (near 45) and the first end of a pair of hydraulic cylinders is connected between the pair of mounting flanges on the support arms.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the auxiliary axle system of Prior Art Figure 1 in view of Smith et al. by providing mounting flanges on the support arms and mounting a pair of hydraulic cylindered to the mounting flanges of the support arms and between the frame so as to provided direct control and stabilization of the support arms as taught by Wyatt et al.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Figure 1 in view of Smith et al. (USPN 6,189,901) as applied to claims 1,2,5,7-9 and 11-13 above, and further in view of Konop (USPN 6,247,713).

Applicant's Prior Art Figure 1 in view of Smith et al. has been discussed in a prior rejection, however, neither show a support plate connected to the cross member and the pair of support arms.

Konop et al. shows an auxiliary axle system (as best seen in Figure 2) having a support plate (the curved portion in the junction of parts 120 and 162). This support plate would increase the strength of the axle system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the axle system of Figure 1 in view of Smith et al. by provided a support plate as taught by Konop et al. to strengthen the U-frame and axle system.

Examiner points out that the addition of an auxiliary axle system on a heavy work vehicle (or any vehicle) is an obvious modification and well known in the art. The particular structure and spatial relationships claimed are shown by the Prior Art references and the spatial relationships are met when the Prior Art Figure 1 is outfitted with an auxiliary axle system.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Christenson et al. (USPN 4,705,133), Hulstein et al. (USPN 6,135,469), Hulstein et al. (USPN 6,311,993), Konop (USPN 6,478,317), Smith et al. (USPN 6,247,712), Buelow (USPN 3,704,896), Christenson (USPN 5,498,021), Guerriero (USPN 3,938,822), Allison et al. (USPN 4,082,305), VanDenberg et al. (USPN 5,540,454), Smith et al. (USPN 5,823,629), Hermann (USPN 5,018,593), Christenson et al. (USPN 4,848,783), Christenson et al. (USPN 4,762,421), McNeilus (USPN 5,018,755).


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George D. Spisich  
November 20, 2005



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